PATENT APPLICATION Serial No. 10/772,786



AMENDMENTS TO THE CLAIMS:

- 1. (Original) In a battery-operated light comprising a first light source, a battery and a first switch in circuit for selectively energizing the first light source to produce light:
 - a source of a reference potential;
 - a comparator responsive to a potential produced by the battery and to the reference potential for de-energizing said first light source when the battery potential is below a predetermined potential;
 - a second light source that operates at a lower current than does said first light source to produce light; and
 - a second switch in circuit with the battery for selectively energizing said second light source to produce light.
- 2. (Original) The battery-operated light of claim 1 wherein said second switch is operable independently of said first switch and/or is operable responsive to said comparator de-energizing said first light source when the battery potential is below the predetermined potential.
- 3. (Original) The battery-operated light of claim 1 wherein said second switch comprises a transistor having a controllable conduction path in circuit with the battery and said second light source and having a control terminal coupled to said comparator for controlling said second light source responsive to said comparator de-energizing said first light source when the battery potential is below the predetermined potential.
- 4. (Original) The battery-operated light of claim 1 wherein said source of reference potential comprises a diode and/or a Zener diode and/or a resistive voltage divider.
- 5. (Previously Presented) The battery-operated light of claim 1 wherein said comparator comprises a first transistor having a controllable conduction path in circuit with the battery and said first light source for energizing and de-energizing said <u>first</u>

• F , >

light source and having a control electrode to which said source of reference potential is coupled.

- 6. (Original) The battery-operated light of claim 5 further comprising a resistive voltage divider coupling said source of reference potential to the control terminal of said first transistor.
- 7. (Previously Presented) In a battery-operated light comprising a first light source, a battery and a first switch in circuit for selectively energizing the first light source to produce light:
 - a source of a reference potential;
 - a comparator responsive to a potential produced by the battery and to the reference potential for de-energizing said first light source when the battery potential is below a predetermined potential,

wherein said comparator comprises a first transistor having a controllable conduction path in circuit with the battery and said first light source for energizing and de-energizing said first light source and having a control electrode to which said source of reference potential is coupled;

- a second light source that operates at a lower current than does said first light source to produce light;
- a second switch in circuit with the battery for selectively energizing said second light source to produce light; and
- a second transistor having a controllable conduction path in circuit with the battery and said source of reference potential and having a control terminal coupled to the controllable conduction path of said first transistor.
- 8. (Previously Presented) In a battery-operated light comprising a first light source, a battery and a first switch in circuit for selectively energizing the first light source to produce light:
 - a source of a reference potential;

a comparator responsive to a potential produced by the battery and to the reference potential for de-energizing said first light source when the battery potential is below a predetermined potential,

wherein said comparator comprises a first transistor having a controllable conduction path in circuit with the battery and said first light source for energizing and de-energizing said first light source and having a control electrode to which said source of reference potential is coupled;

a second light source that operates at a lower current than does said first light source to produce light; and

a second switch in circuit with the battery for selectively energizing said second light source to produce light,

wherein said second switch comprises a second transistor having a controllable conduction path in circuit with the battery and said second light source and having a control terminal coupled to the controllable conduction path of said first transistor.

- 9. (Original) The battery-operated light of claim 1 wherein said first light source includes an incandescent lamp and said second light source includes a solid state light source and/or a light emitting diode.
- 10. (Original) The battery-operated light of claim 1 further comprising means for energizing said second light source responsive to said comparator de-energizing said first light source when the battery potential is below the predetermined potential.
- 11. (Previously Presented) In a battery-operated light comprising a first light source, a battery and a first switch in circuit for selectively energizing the first light source to produce light:
 - a source of a reference potential;
 - a comparator responsive to a potential produced by the battery and to the reference potential for de-energizing said first light source when the battery potential

· n , >

is below a predetermined potential;

a second light source that operates at a lower current than does said first light source to produce light;

a second switch in circuit with the battery for selectively energizing said second light source to produce light; and

a second transistor having a controllable conduction path in circuit with the battery and said second light source and having a control terminal coupled to a controllable conduction path of a first transistor of said comparator, wherein said second transistor energizes said second light source responsive to said comparator denergizing said first light source when the battery potential is below the predetermined potential.

- 12. (Original) In a battery-operated light comprising an incandescent light source, a battery and a first switch in circuit for selectively energizing the incandescent light source to produce light:
 - a source of a reference potential;
 - a comparing circuit responsive to a potential produced by the battery and to the reference potential for de-energizing said incandescent light source when the battery potential is below a predetermined potential;
 - a solid state light source; and
 - a second switch in circuit with the battery for selectively energizing said solid state light source to produce light independently of said first switch and/or when the battery potential is below the predetermined potential.
- 13. (Original) The battery-operated light of claim 12 wherein said source of reference potential comprises a diode and/or a Zener diode and/or a resistive voltage divider.
- 14. (Original) The battery-operated light of claim 12 wherein said second switch is operable responsive to said comparing circuit de-energizing said incandescent light source when the battery potential is below the predetermined potential.

- 15. (Original) The battery-operated light of claim 12 wherein said second switch comprises a transistor having a controllable conduction path in circuit with the battery and said solid state light source and having a control terminal coupled to said comparing circuit for controlling said solid state light source responsive to said comparing circuit de-energizing said incandescent light source when the battery potential is below the predetermined potential.
- 16. (Original) The battery-operated light of claim 12 wherein said comparing circuit comprises a first transistor having a controllable conduction path in circuit with the battery and said incandescent light source for energizing and de-energizing said incandescent light source and having a control electrode to which said source of reference potential is coupled.
- 17. (Original) The battery-operated light of claim 16 further comprising a resistive voltage divider coupling said source of reference potential to the control terminal of said first transistor.
- 18. (Previously Presented) In a battery-operated light comprising an incandescent light source, a battery and a first switch in circuit for selectively energizing the incandescent light source to produce light:
 - a source of a reference potential;
 - a comparing circuit responsive to a potential produced by the battery and to the reference potential for de-energizing said incandescent light source when the battery potential is below a predetermined potential;

said comparing circuit comprising a first transistor having a controllable conduction path in circuit with the battery and said incandescent light source for energizing and de-energizing said incandescent light source and having a control electrode to which said source of reference potential is coupled;

- a solid state light source;
- a second switch in circuit with the battery for selectively energizing said solid

state light source to produce light independently of said first switch, or to produce light when the battery potential is below the predetermined potential, to produce light independently of said first switch when the battery potential is below the predetermined potential; and

a second transistor having a controllable conduction path in circuit with the battery and said source of reference potential and having a control terminal coupled to the controllable conduction path of said first transistor.

- 19. (Original) The battery-operated light of claim 16 wherein said second switch comprises a second transistor having a controllable conduction path in circuit with the battery and said solid state light source and having a control terminal coupled to the controllable conduction path of said first transistor.
- 20. (Previously Presented) The battery-operated light of claim 12 further comprising means for energizing said solid state light source responsive to said comparing circuit de-energizing said incandescent light source when the battery potential is below the predetermined potential.
- 21. (Previously Presented) In a battery-operated light comprising an incandescent light source, a battery and a first switch in circuit for selectively energizing the incandescent light source to produce light:
 - a source of a reference potential;
 - a comparing circuit responsive to a potential produced by the battery and to the reference potential for de-energizing said incandescent light source when the battery potential is below a predetermined potential;
 - a solid state light source;
 - a second switch in circuit with the battery for selectively energizing said solid state light source to produce light independently of said first switch, or to produce light when the battery potential is below the predetermined potential, to produce light independently of said first switch when the battery potential is below the

predetermined potential; and

means for energizing said solid state light source responsive to said comparing circuit de-energizing said incandescent light source when the battery potential is below the predetermined potential,

wherein said means for energizing comprises a second transistor having a controllable conduction path in circuit with the battery and said second light source and having a control terminal coupled to the controllable conduction path of said first transistor.

22. (Currently Amended) A power control for battery-operated apparatus comprising:

first and second terminals across which for receiving a battery potential may
be applied;

a first transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to said first terminal;

a second transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to said second terminal; and

a source of reference potential coupled between the second electrode of said first transistor and the control electrode of said second transistor;

wherein the second electrode of said second transistor is coupled to the control electrode of said first transistor and to said first terminal via a load.

23. (Original) The power control of claim 22 further comprising a third transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to a second load and the control electrode thereof being coupled to the second electrode of said second transistor.

- 24. (Original) The power control of claim 23 further comprising a switch in circuit with the second load and said third transistor for making and breaking connection with said first terminal.
- 25. (Original) The power control of claim 23 wherein said load includes an incandescent lamp and said second load includes a solid state light source and/or a light emitting diode.
- 26. (Previously Presented) The power control of claim 22 further comprising a switch in circuit with said load and with said first transistor or said second transistor or both said first transistor and said second transistor for making and breaking connection with said first terminal.
- 27. (Original) The power control of claim 22 wherein said source of reference potential comprises a diode and/or a Zener diode and/or a resistive voltage divider.
- 28. (Currently Amended) A power control for battery-operated apparatus comprising: first and second terminals across which for receiving a battery potential may be applied;
 - a first switch having first and second ends, the first end thereof being coupled to said first terminal;
 - a first transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to said second terminal; and
 - a source of reference potential coupled between the second end of said first switch and the control electrode of said first transistor;
 - wherein the second electrode of said first transistor is coupled to said first terminal via a load.

- 29. (Currently Amended) A power control for battery-operated apparatus comprising: first and second terminals across which for receiving a battery potential may be applied;
 - a first switch having first and second ends, the first end thereof being coupled to said first terminal;
 - a first transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to said second terminal;
 - a source of reference potential coupled between the second end of said first switch and the control electrode of said first transistor;

wherein the second electrode of said first transistor is coupled to said first terminal via a load; and

a second transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to a second load and the control electrode thereof being coupled to the second electrode of said first transistor.

- 30. (Original) The power control of claim 29 further comprising a second switch in circuit with the second load and said second transistor for making and breaking connection with said first terminal, wherein said second switch is operable independently of said first switch.
- 31. (Previously Presented) The power control of claim 29 wherein said load includes an incandescent lamp and said second load includes a solid state light source and/or a light emitting diode.
- 32. (Previously Presented) The power control of claim 28 wherein said source of reference potential comprises a diode and/or a Zener diode and/or a resistive voltage

divider.

33. (Currently Amended) A power control for battery-operated apparatus comprising: first and second terminals across which for receiving a battery potential may be applied;

a first switch having first and second ends, the first end thereof being coupled to said first terminal;

a first transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to said second terminal;

a source of reference potential coupled between the second end of said first switch and the control electrode of said first transistor;

wherein the second electrode of said first transistor is coupled to said first terminal via a load; and

a second transistor having a controllable conduction path coupled between the battery and said source of reference potential and having a control terminal coupled to the controllable conduction path of said first transistor.

- 34. (Previously Presented) In a battery-operated flashlight comprising a first light source, a battery and a first switch in circuit for selectively energizing the first light source to produce light:
 - a source of a reference potential;
 - a comparator responsive to a potential produced by the battery and to the reference potential for de-energizing said first light source when the battery potential is below a predetermined potential; and

a second light source that operates to produce light at a lower current than does said first light source, wherein said second light source is selectively operable from the battery to produce light at least after said comparator de-energizes said first light source.

- 35. (Currently Amended) A power control for a battery-operated light comprising:

 first and second terminals across which for receiving a battery potential may
 be applied;
 - a first switch having first and second ends, the first end thereof being coupled to said first terminal;
 - a transistor having a controllable conduction path between first and second electrodes and having a control electrode for controlling the conduction of the controllable conduction path thereof, the first electrode thereof being coupled to said second terminal;
 - a source of reference potential coupled between the second end of said first switch and the control electrode of said transistor;
 - a first light source for producing light when electrically energized;
 wherein the second electrode of said first transistor is coupled to said first
 terminal via said first light source;
 - a second light source for producing light when energized; and a second switch operable independently of said first switch,
 - wherein said second switch and said second light source are coupled between said first and second terminals for selectively energizing said second light source.